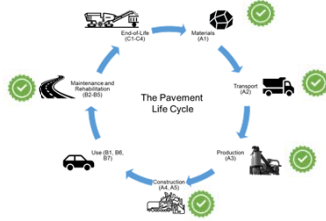


Cradle-to-Grave LCA

- Functional Unit: One lane-mile
 - 12 ft wide



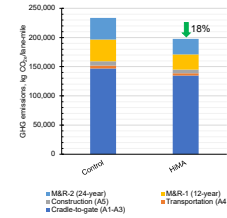
	HiMA 7.5% SBS	Control 0% SBS
Subgrade	1.00	1.00
Agg Base	1.00	1.00
Asphalt Base	1.00	1.00
Surface	1.00	1.00
Subtotal	4.00	4.00
Transport (A2)	0.00	0.00
Production (A3)	0.00	0.00
Maintenance and Rehabilitation (B1-B5)	0.00	0.00
End-of-Life (C1-C4)	0.00	0.00
Total	4.00	4.00

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Cradle-to-Grave Results

Functional Unit: One lane-mile

- From Cradle-to-Grave perspective HiMA section had 18% lower GHG emissions



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Future M&R Scheduling

- The structural layer coefficients for HiMA mixtures are 0.92
 - Compared to 0.54 (ALDOT) for conventional asphalt mixtures.

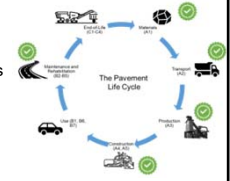


	HiMA 7.5% SBS	Control 0% SBS
Subgrade	1.00	1.00
Agg Base	1.00	1.00
Asphalt Base	1.00	1.00
Surface	1.00	1.00
Subtotal	4.00	4.00
Transport (A2)	0.00	0.00
Production (A3)	0.00	0.00
Maintenance and Rehabilitation (B1-B5)	0.00	0.00
End-of-Life (C1-C4)	0.00	0.00
Total	4.00	4.00

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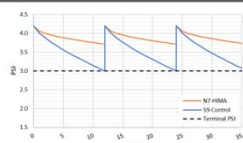
Summary

- Cradle-to-Gate LCA results
 - HiMA mixture had higher GHG emissions compared to control
- Cradle-to-Constructed LCA results
 - HiMA mixture showed 9% lower GHG emissions compared to control
- Cradle-to-Grave LCA results
 - HiMA mixture showed 18% lower GHG emissions compared to control
- For specialty mixtures it is important to consider life-extension benefits into LCA

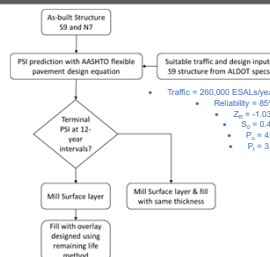


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Future M&R Scheduling



Year	Control Activity	HiMA Activity
0	Initial construction	Initial construction
12	1.2" mill and 1.6" fill	1.0" mill and 1.0" fill
24	1.6" mill and 2.0" fill	1.0" mill and 1.0" fill
35	end-of-analysis period	end-of-analysis period



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Thank You

Questions?

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